09/936,146 .

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 * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 15:37:32 ON 17 JUN 2004

=> file biosis medline caplus wpid uspatfull
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       4.41       4.41

FILE 'BIOSIS' ENTERED AT 15:50:00 ON 17 JUN 2004
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FILE 'CAPLUS' ENTERED AT 15:50:00 ON 17 JUN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE 'USPATFULL' ENTERED AT 15:50:00 ON 17 JUN 2004
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*** YOU HAVE NEW MAIL ***

=> s inhibitor? (3a) group I intron and self splic?
L1          16 INHIBITOR? (3A) GROUP I INTRON AND SELF SPLIC?

=> s l1 and guide sequence
L2           1 L1 AND GUIDE SEQUENCE

=> d l2 bib abs

L2   ANSWER 1 OF 1  WPIDS  COPYRIGHT 2004 THOMSON DERWENT on STN
AN   2000-638210 [61]   WPIDS
DNC  C2000-191938
TI   Group-I intron self-
     splicing reaction inhibitor for treating diseases caused
     by pathogenic fungi, has oligonucleotide having sequence that binds to 5'
     internal guide sequence of precursor RNA containing
     intron.
DC   B04 D16
IN   DISNEY, M D; GRYAZNOV, S M; TESTA, S M; TURNER, D H
PA   (GERO-N) GERON CORP; (UYRP) UNIV ROCHESTER
CYC  91
PI   WO 2000055374   A1 20000921 (200061)* EN   37
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
            OA PT SD SE SL SZ TZ UG ZW
         W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE
            ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
            LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK
            SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
     AU 2000038927   A  20001004 (200101)
ADT  WO 2000055374 A1 WO 2000-US7045 20000315; AU 2000038927 A AU 2000-38927
     20000315
FDT  AU 2000038927 A Based on WO 2000055374
PRAI US 1999-124451P      19990315
AN   2000-638210 [61]   WPIDS
AB   WO 200055374 A UPAB: 20011129
     NOVELTY - An inhibitor (I) of a Group-I
     intron (IN) self-splicing reaction comprises
     an oligonucleotide (ON) having a polynucleotide sequence that binds to a
```

5' internal **guide sequence** (IGS) of a precursor RNA containing a (IN), or to a portion. (ON) is capable of binding with the IGS and of being trans-spliced to the 3' exon of the precursor RNA.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a composition comprising (I) and a carrier; and

(2) designing (I) comprising choosing a nucleotide sequence that binds to IGS present in precursor RNA containing (IN), or to a portion, and preparing an (ON) having the chosen sequence.

ACTIVITY - Fungicide.

MECHANISM OF ACTION - Inhibitor of (IN) **self-splicing** reaction. Pneumocystis carinii splicing reactions were conducted by reannealing about 180 nM of internally radiolabeled precursor RNA at 55 deg. C in a buffer containing MgCl2 and slow cooling to 37 deg. C. A 3 micro l solution of buffer containing either 2 mM pG and/or 60 micro M (dA)n(dT)n(dG)n(dA)n(dC)n(rU) or neither was added and allowed to react for 1 hour at 37 deg. C. To check sequence specificity, the **self-splicing** reaction was conducted with the control oligonucleotide (dC)n(dA)n(dG)n(dT)n(dA)n(rU) as above under conditions that maximized production of the 5'exon-intron band with (dA)n(dT)n(dG)n(dA)n(dC)n(rU). The results showed that in the absence of pG and (dA)n(dT)n(dG)n(dA)n(dC)n(rU) the hydrolytic production of the 5' exon-intron band at 2mM Mg2+ was about 10 times less than in the presence of (dA)n(dT)n(dG)n(dA)n(dC)n(rU).

USE - (I) is useful for inhibiting **self-splicing** of (IN) by contacting a precursor RNA containing (IN) with an (ON) which trans-splices to a 3'exon sequence of precursor RNA. (I) is useful for inhibiting the growth of an organism transcribing a precursor RNA containing (IN) by contacting the organism with (ON) for growth inhibition (claimed). (I) is useful for treating a disease or condition caused by organisms such as Pneumocystis carinii, Candida albicans and Aspergillus nidulans containing (IN).

DESCRIPTION OF DRAWING(S) - The figure shows a schematic representation of the **self-splicing** (cis-splicing) and trans-splicing reactions of a Group I intron.

Dwg.1/7

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=> d his

     (FILE 'HOME' ENTERED AT 15:37:32 ON 17 JUN 2004)

     FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 15:50:00 ON
     17 JUN 2004
L1            16 S INHIBITOR? (3A) GROUP I INTRON AND SELF SPLIC?
L2             1 S L1 AND GUIDE SEQUENCE

=> dup rem l1
PROCESSING COMPLETED FOR L1
L3            10 DUP REM L1 (6 DUPLICATES REMOVED)

=> s l3 and rna
L4             8 L3 AND RNA

=> s l4 and 3 (4a) exon
L5             2 L4 AND 3 (4A) EXON

=> s l5 not l2
L6             1 L5 NOT L2

=> d l6 bib abs

L6   ANSWER 1 OF 1  USPATFULL on STN
AN     2003:57549  USPATFULL
```

TI SMALL MOLECULE MODULATION OF RIBOZYMES
IN CUI, MEI, ANN ARBOR, MI, UNITED STATES
CZARNIK, ANTHONY WILLIAM, SAN DIEGO, CA, UNITED STATES
MEI, HOUNG-YAU, ANN ARBOR, MI, UNITED STATES
PA Warner-Lambert Company,, Marris Plains, NJ (U.S. corporation)
PI US 2003040114 A1 20030227
AI US 1999-326956 A1 19990607 (9)
RLI Continuation of Ser. No. US 1997-923487, filed on 4 Sep 1997, ABANDONED
PRAI US 1996-24685P 19960905 (60)
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 29
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)
LN.CNT 719
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for selecting a compound that modulates the activity of a ribozyme in vivo in an organism comprising: (a) measuring in an assay the ability of a compound to selectively bind to a ribozyme thereby inhibiting the function of said ribozyme; and (b) selecting the assayed compound for use in modulating the activity of said ribozyme in vivo in an organism as a pharmaceutical agent as well as a method for selecting a compound for diagnosing the presence of a ribozyme in an organism that is pathogenic to an animal or plant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
=> s RNA (15a) group I intron
L8         1014 RNA (15A) GROUP I INTRON

=> s l8 and inhibit? (10a) oligo?
   3 FILES SEARCHED...
L9          216 L8 AND INHIBIT? (10A) OLIGO?

=> s l9 and 5 (2a) internal guide sequnce (4a) RNA
L10           0 L9 AND 5 (2A) INTERNAL GUIDE SEQUNCE (4A) RNA

=> s l9 and 5 (2a) internal guide sequence (4a) RNA
L11           4 L9 AND 5 (2A) INTERNAL GUIDE SEQUENCE (4A) RNA

=> s l11 not l5
L12           4 L11 NOT L5

=> dup rem l12
PROCESSING COMPLETED FOR L12
L13            4 DUP REM L12 (0 DUPLICATES REMOVED)

=> d l13 bib abs 1-4

L13  ANSWER 1 OF 4  USPATFULL on STN
AN      2003:237907  USPATFULL
TI      Compositions and methods for the therapy and diagnosis of colon cancer
IN      King, Gordon E., Shoreline, WA, UNITED STATES
        Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
        Xu, Jiangchun, Bellevue, WA, UNITED STATES
        Secrist, Heather, Seattle, WA, UNITED STATES
        Jiang, Yuqiu, Kent, WA, UNITED STATES
PA      Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI      US 2003166064       A1   20030904
AI      US 2002-99926       A1   20020314 (10)
RLI     Continuation-in-part of Ser. No. US 2001-33528, filed on 26 Dec 2001,
        PENDING Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul
        2001, PENDING
PRAI    US 2001-302051P     20010629 (60)
        US 2001-279763P     20010328 (60)
        US 2000-223283P     20000803 (60)
DT      Utility
FS      APPLICATION
LREP    SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
        SEATTLE, WA, 98104-7092
CLMN    Number of Claims: 17
ECL     Exemplary Claim: 1
DRWN    No Drawings
LN.CNT 8531
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      Compositions and methods for the therapy and diagnosis of cancer,
        particularly colon cancer, are disclosed. Illustrative compositions
        comprise one or more colon tumor polypeptides, immunogenic portions
        thereof, polynucleotides that encode such polypeptides, antigen
        presenting cell that expresses such polypeptides, and T cells that are
        specific for cells expressing such polypeptides. The disclosed
        compositions are useful, for example, in the diagnosis, prevention
        and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13  ANSWER 2 OF 4  USPATFULL on STN
AN      2003:106233  USPATFULL
TI      Compositions and methods for the therapy and diagnosis of pancreatic
        cancer
```

IN Benson, Darin R., Seattle, WA, UNITED STATES
Kalos, Michael D., Seattle, WA, UNITED STATES
Lodes, Michael J., Seattle, WA, UNITED STATES
Persing, David H., Redmond, WA, UNITED STATES
Hepler, William T., Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2003073144 A1 20030417
AI US 2002-60036 A1 20020130 (10)
PRAI US 2001-333626P 20011127 (60)
US 2001-305484P 20010712 (60)
US 2001-265305P 20010130 (60)
US 2001-267568P 20010209 (60)
US 2001-313999P 20010820 (60)
US 2001-291631P 20010516 (60)
US 2001-287112P 20010428 (60)
US 2001-278651P 20010321 (60)
US 2001-265682P 20010131 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 14253
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 3 OF 4 USPATFULL on STN
AN 2002:272801 USPATFULL
TI Compositions and methods for the therapy and diagnosis of colon cancer
IN Stolk, John A., Bothell, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Chenault, Ruth A., Seattle, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002150922 A1 20021017
AI US 2001-998598 A1 20011116 (9)
PRAI US 2001-304037P 20010710 (60)
US 2001-279670P 20010328 (60)
US 2001-267011P 20010206 (60)
US 2000-252222P 20001120 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 9233
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions

thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 4 OF 4 USPATFULL on STN
AN 2002:243051 USPATFULL
TI Compositions and methods for the therapy and diagnosis of ovarian cancer
IN Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002132237 A1 20020919
AI US 2001-867701 A1 20010529 (9)
PRAI US 2000-207484P 20000526 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 25718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d l13 1 kwic

L13 ANSWER 1 OF 4 USPATFULL on STN
SUMM [2042] For example, certain amino acids may be substituted for other amino acids **in a** protein structure **without appreciable loss of** interactive **binding** capacity **with** structures **such as, for example**, antigen-**binding** regions **of** antibodies **or** binding sites on substrate **molecules**. Since it **is the** interactive **capacity** and **nature** of **a** protein that defines that protein's **biological functional** activity, **certain amino** acid **sequence substitutions can** be made in a **protein** sequence, and, of course, **its** underlying DNA coding sequence, **and** nevertheless obtain **a protein** with like properties. It **is** thus contemplated that various changes may be made in the peptide sequences of the disclosed compositions, **or** corresponding **DNA sequences** which encode said peptides **without appreciable** loss of their biological utility or activity.
TABLE 1

Amino Acids Codons

Alanine	Ala	A	GCA GCC GCG GCU
Cysteine	Cys.	. .	Glu E GAA GAG
Phenylalanine	Phe	F	UUC UUU
Glycine	Gly	G	GGA GGC GGG GGU
Histidine	His	H	CAC **CAU**
Isoleucine	Ile	I	AUA **AUC AUU**
Lysine	**Lys**	K	AAA AAG
Leucine	Leu	L	UUA UUG CUA CUC CUG CUU
Methionine	Met	M	AUG
Asparagine	Asn	N	AAC AAU
Proilne CCU	**Pro**	**P**	**CCA** CCC CCG
Glutamine	Gln	Q	CAA CAG
Arginine	Arg	R	AGA AGG CGA CGC CGG CGU
Serine	Ser	S. . .	

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=> d his

     (FILE 'HOME' ENTERED AT 15:37:32 ON 17 JUN 2004)

     FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 15:50:00 ON
     17 JUN 2004
L1            16 S INHIBITOR? (3A) GROUP I INTRON AND SELF SPLIC?
L2             1 S L1 AND GUIDE SEQUENCE
L3            10 DUP REM L1 (6 DUPLICATES REMOVED)
L4             8 S L3 AND RNA
L5             2 S L4 AND 3 (4A) EXON
L6             1 S L5 NOT L2
L7             8 S L3 NOT L5
L8          1014 S RNA (15A) GROUP I INTRON
L9           216 S L8 AND INHIBIT? (10A) OLIGO?
L10            0 S L9 AND 5 (2A) INTERNAL GUIDE SEQUNCE (4A) RNA
L11            4 S L9 AND 5 (2A) INTERNAL GUIDE SEQUENCE (4A) RNA
L12            4 S L11 NOT L5
L13            4 DUP REM L12 (0 DUPLICATES REMOVED)

=> s l9 and precursor (5a) RNA
L14            9 L9 AND PRECURSOR (5A) RNA

=> s l14 not l5
L15            9 L14 NOT L5

=> dup rem l15
PROCESSING COMPLETED FOR L15
L16            9 DUP REM L15 (0 DUPLICATES REMOVED)

=> d l16 bib abs 1-9

L16  ANSWER 1 OF 9  USPATFULL on STN
AN     2004:133852  USPATFULL
TI     Nucleic acid-mediated treatment of diseases or conditions related to
       levels of vascular endothelial growth factor receptor (VEGF-R)
IN     Pavco, Pamela, Lafayette, CO, UNITED STATES
       McSwiggen, James, Boulder, CO, UNITED STATES
       Stinchcomb, Dan, Ft. Collins, CO, UNITED STATES
       Escobedo, Jaime, Alamo, CA, UNITED STATES
       Kim, Julian, Shaker Heights, OH, UNITED STATES
       Lindner, Daniel, Shaker Heights, OH, UNITED STATES
PA     Ribozyme Pharmaceuticals, Inc. (U.S. corporation)
PI     US 2004102389      A1   20040527
AI     US 2002-287949     A1   20021104 (10)
RLI    Continuation-in-part of Ser. No. US 2002-138674, filed on 3 May 2002,
       PENDING Continuation-in-part of Ser. No. US 2001-870161, filed on 29 May
       2001, PENDING Continuation-in-part of Ser. No. US 2000-708690, filed on
       7 Nov 2000, PENDING Continuation-in-part of Ser. No. US 1999-371722,
       filed on 10 Aug 1999, GRANTED, Pat. No. US 6534872 Continuation-in-part
       of Ser. No. US 1996-584040, filed on 11 Jan 1996, GRANTED, Pat. No. US
       6346398
PRAI   WO 1996-US17480     19961025
       WO 2002-US17674     20020529
       US 1995-5974P       19951026 (60)
DT     Utility
FS     APPLICATION
LREP   MCDONNELL BOEHNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE
       3200, CHICAGO, IL, 60606
CLMN   Number of Claims: 31
ECL    Exemplary Claim: 1
DRWN   40 Drawing Page(s)
LN.CNT 24043
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to nucleic acid molecules such as ribozymes, DNAzymes, short interfering RNA (siRNA), short interfering nuleic acid (siNA), and antisense which modulate the synthesis, expression and/or stability of an mRNA encoding one or more receptors of vascular endothelial growth factor, such as flt-1 (VEGFR1) and/or KDR (VEGFR2). Nucleic acid molecules and methods for the inhibition of angiogenesis and treatment of cancer and other conditions associated with VEGF-R are provided, optionally in conjunction with other therapeutic agents such as interferons.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 2 OF 9 USPATFULL on STN
AN 2004:39569 USPATFULL
TI Oligonucleotide directed misfolding of RNA
IN Turner, Douglas H., Pittsford, NY, UNITED STATES
Childs, Jessica L., Zurich, SWITZERLAND
Disney, Matthew D., Zurich, SWITZERLAND
PI US 2004030111 A1 20040212
AI US 2003-465730 A1 20030619 (10)
PRAI US 2002-390241P 20020619 (60)
DT Utility
FS APPLICATION
LREP Edwin V. Merkel, NIXON PEABODY LLP, Clinton Square, P.O. Box 31051, Rochester, NY, 14603-1051
CLMN Number of Claims: 85
ECL Exemplary Claim: 1
DRWN 10 Drawing Page(s)
LN.CNT 2086
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Oligonucleotides that bind to and cause misfolding of functional RNA molecules are described. Also disclosed are the uses of the oligonucleotides to modify the function of such RNA molecules, to stabilize the RNA molecules in a misfolded conformation, to disrupt survivability of a pathogen or cancer cells (that require activity of the RNA molecule for survival) by disrupting the activity of the RNA molecules, treating or preventing pathogen infection in a patient, and treating a cancerous condition in a patient. Methods of designing the oligonucleotides of the present invention are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 3 OF 9 USPATFULL on STN
AN 2003:220230 USPATFULL
TI Nucleic acid treatment of diseases or conditions related to levels of Ras
IN McSwiggen, James, Boulder, CO, UNITED STATES
PI US 2003153521 A1 20030814
AI US 2002-238700 A1 20020910 (10)
PRAI WO 2002-US16840 20020529
US 2001-318471P 20010910 (60)
DT Utility
FS APPLICATION
LREP MCDONNELL BOEHNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE 3200, CHICAGO, IL, 60606
CLMN Number of Claims: 67
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 6626
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to nucleic acid molecules, including enzymatic nucleic acid molecules, such as DNAzymes (e.g. DNA enzymes, catalytic DNA), that modulate the expression of Ras genes such as K-Ras,

H-Ras, and/or N-Ras.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 4 OF 9 USPATFULL on STN
AN 2003:180685 USPATFULL
TI Enzymatic nucleic acid treatment of diseases or conditions related to levels of HIV
IN McSwiggen, James, Boulder, CO, UNITED STATES
PI US 2003124513 A1 20030703
AI US 2002-157580 A1 20020529 (10)
PRAI US 2001-294140P 20010529 (60)
DT Utility
FS APPLICATION
LREP MCDONNELL BOEHNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE 3200, CHICAGO, IL, 60606
CLMN Number of Claims: 75
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 4023
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to nucleic acid molecules, including enzymatic nucleic acid molecules, such as hammerhead ribozymes, DNAzymes, siRNA, aptamers, decoys and allozymes, which modulate the expression of HIV genes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 5 OF 9 USPATFULL on STN
AN 2003:153383 USPATFULL
TI Nucleic acid treatment of diseases or conditions related to levels of HER2
IN McSwiggen, James, Boulder, CO, UNITED STATES
PI US 2003105051 A1 20030605
AI US 2002-163552 A1 20020606 (10)
PRAI US 2001-296249P 20010606 (60)
DT Utility
FS APPLICATION
LREP MCDONNELL BOEHNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE 3200, CHICAGO, IL, 60606
CLMN Number of Claims: 52
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 12746
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to enzymatic nucleic acid molecules, including DNAzymes (DNA enzymes, catalytic DNA), siRNA, antisense, aptamers and decoys, that modulate the expression of HER2 genes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 6 OF 9 USPATFULL on STN
AN 2003:133918 USPATFULL
TI Method and reagent for the treatment of Alzheimer's disease
IN Blatt, Lawrence, Boulder, CO, UNITED STATES
McSwiggen, James, Boulder, CO, UNITED STATES
PA Ribozyme Pharmaceuticals, Inc. (U.S. corporation)
PI US 2003092003 A1 20030515
AI US 2001-930423 A1 20010815 (9)
RLI Continuation-in-part of Ser. No. US 2000-745237, filed on 20 Dec 2000, PENDING
PRAI US 1999-173612P 19991229 (60)
DT Utility
FS APPLICATION

LREP MCDONNELL BOEHNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE 3200, CHICAGO, IL, 60606
CLMN Number of Claims: 54
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 7808
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Nucleic acid molecules, including antisense and enzymatic nucleic acid molecules, such as hammerhead ribozymes, DNAzymes, allozymes (allosteric ribozymes, aptazymes) and antisense, which modulate and/or detect the expression of molecular targets impacting the development and progression of Alzheimer's disease, in particular, the expression of beta secretase (BACE), presenilin-2 (ps-2), and amyloid precursor protein (APP) genes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 7 OF 9 USPATFULL on STN
AN 2003:273487 USPATFULL
TI MORC gene compositions and methods of use
IN Moreadith, Randall W., Chapel Hill, NC, United States
Zinn, Andrew R., Dallas, TX, United States
Watson, Mark L., Dallas, TX, United States
Inoue, Norimitsu, Yao, JAPAN
Hess, Karl D., McDade, TX, United States
Albright, George M., Irving, TX, United States
PA Board of Regents, The University of Texas System, Austin, TX, United States (U.S. corporation)
PI US 6632934 B1 20031014
AI US 1999-409604 19990930 (9)
PRAI US 1998-102575P 19980930 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Ungar, Susan
LREP Fulbright & Jaworski L.L.P.
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN 27 Drawing Figure(s); 8 Drawing Page(s)
LN.CNT 8123
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are compositions and methods comprising a novel mammalian gene, designated MORC, that is expressed in male germ cells. Also disclosed are polynucleotide compositions comprising a MORC gene from human and murine sources, and polypeptides encoded by these nucleic acid sequences. Methods for preparing MORC polypeptides, transformed host cells, and antibodies reactive with MORC polypeptides are also provided. In certain embodiments, the invention describes methods for diagnosing and treating infertility or testicular cancer, as well as methods for identifying MORC-related polynucleotide and polypeptide compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 8 OF 9 USPATFULL on STN
AN 2003:40570 USPATFULL
TI Osf2/Cbfa1 nucleic acids and methods of use therefor
IN Ducy, Patricia, Houston, TX, United States
Karsenty, Gerard, Houston, TX, United States
PA Board of Regents, The University of Texas System, Austin, TX, United States (U.S. corporation)
PI US 6518063 B1 20030211
AI US 1998-86663 19980529 (9)
PRAI US 1998-80189P 19980324 (60)
US 1997-48430P 19970529 (60)
DT Utility

FS GRANTED
EXNAM Primary Examiner: Nguyen, Dave T.; Assistant Examiner: Shukla, Ram R.
LREP Fulbright & Jaworski, LLP
CLMN Number of Claims: 30
ECL Exemplary Claim: 1
DRWN 54 Drawing Figure(s); 37 Drawing Page(s)
LN.CNT 8933
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are methods and compositions comprising a novel osteoblast-specific transcription factor designated Osf2/Cbfa1. Also disclosed are nucleic acid segments encoding this polypeptide derived from human cell lines, and the use of these polynucleotides in a variety of diagnostic and therapeutic applications. Methods, compositions, kits, and devices are also provided for identifying compounds which are inhibitors of osteoblast differentiation, and identifying Osf2/Cbfa1 polynucleotides and polypeptides in a sample. Also disclosed are nucleic acid compositions comprising an Osf2 promoter, and the use of the promoter in heterologous and homologous gene transcription and protein production.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 9 OF 9 USPATFULL on STN
AN 2000:102061 USPATFULL
TI DNA polymerase extension assay
IN Cole, James L., Doylestown, PA, United States
Kuo, Lawrence C., Solebury, PA, United States
Olsen, David B., Lansdale, PA, United States
PA Merck & Co., Inc., Rahway, NJ, United States (U.S. corporation)
PI US 6100028 20000808
WO 9640994 19961219
AI US 1998-973139 19980731 (8)
WO 1996-US8330 19960603
19980731 PCT 371 date
19980731 PCT 102(e) date
DT Utility
FS Granted
EXNAM Primary Examiner: Guzo, David; Assistant Examiner: Larson, Thomas G.
LREP Yablonsky, Michael D., Tribble, Jack L.
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 5 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 663
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides rapid accurate sensitive assays specific for the detection of at least one a single stranded oligonucleotide produced by the action of an enzyme on a substrate. The assays are useful to detect the presence in a sample of an enzyme which acts on an oligonucleotide substrate to generate a single stranded **oligonucleotide** product and to detect **inhibitors** of such an enzyme.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=> d his

     (FILE 'HOME' ENTERED AT 15:37:32 ON 17 JUN 2004)

     FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 15:50:00 ON
     17 JUN 2004
L1            16 S INHIBITOR? (3A) GROUP I INTRON AND SELF SPLIC?
L2             1 S L1 AND GUIDE SEQUENCE
L3            10 DUP REM L1 (6 DUPLICATES REMOVED)
L4             8 S L3 AND RNA
L5             2 S L4 AND 3 (4A) EXON
L6             1 S L5 NOT L2
L7             8 S L3 NOT L5
L8          1014 S RNA (15A) GROUP I INTRON
L9           216 S L8 AND INHIBIT? (10A) OLIGO?
L10            0 S L9 AND 5 (2A) INTERNAL GUIDE SEQUNCE (4A) RNA
L11            4 S L9 AND 5 (2A) INTERNAL GUIDE SEQUENCE (4A) RNA
L12            4 S L11 NOT L5
L13            4 DUP REM L12 (0 DUPLICATES REMOVED)
L14            9 S L9 AND PRECURSOR (5A) RNA
L15            9 S L14 NOT L5
L16            9 DUP REM L15 (0 DUPLICATES REMOVED)

=> s inhibit? (10a) group I intron
L17          117 INHIBIT? (10A) GROUP I INTRON

=> s l17 and RNA (3a) splic?
   3 FILES SEARCHED...
L18           55 L17 AND RNA (3A) SPLIC?

=> s l18 and oligonucleotide?
L19           16 L18 AND OLIGONUCLEOTIDE?

=> s l19 not l5
L20           16 L19 NOT L5

=> s l20 not l1
L21           15 L20 NOT L1

=> s l21 not l16
L22           14 L21 NOT L16

=> dup rem l22
PROCESSING COMPLETED FOR L22
L23            12 DUP REM L22 (2 DUPLICATES REMOVED)

=> d l23 bib abs 1-12

L23  ANSWER 1 OF 12  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2004:34483  CAPLUS
DN   140:213222
TI   New approaches to targeting RNA with oligonucleotides:
     Inhibition of group I intron
     self-splicing
AU   Disney, Matthew D.; Childs, Jessica L.; Turner, Douglas H.
CS   Departments of Chemistry and Pediatrics, University of Rochester,
     Rochester, NY, 14627-0216, USA
SO   Biopolymers (2004), 73(1), 151-161
     CODEN: BIPMAA; ISSN: 0006-3525
PB   John Wiley & Sons, Inc.
DT   Journal
LA   English
AB   RNA is one class of relatively unexplored drug targets.  Since RNAs play a
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myriad of essential roles, it is likely that new drugs can be developed that target RNA. There are several factors that make targeting RNA particularly attractive. First, the amount of information about the roles of RNA in essential biol. processes is currently being expanded. Second, sequence information about targetable RNA is pouring out of genome sequencing efforts at unprecedented levels. Third, designing and screening potential **oligonucleotide** therapeutics to target RNA is relatively simple. The use of **oligonucleotides** in cell culture, however, presents several challenges such as **oligonucleotide** uptake and stability, and selective targeting of genes of interest. Here, we review investigations aimed at targeting RNA with **oligonucleotides** that can circumvent several of these potential problems. The hallmark of the strategies discussed is the use of short **oligonucleotides**, which may have the advantage of higher cellular uptake and improved binding selectivity compared to longer **oligonucleotides**. These strategies have been applied to Group I introns from the mammalian pathogens Pneumocystis carinii and Candida albicans. Both are examples of fungal infections that are increasing in number and prevalence.

RE.CNT 102 THERE ARE 102 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 2 OF 12 USPATFULL on STN
AN 2003:237907 USPATFULL
TI Compositions and methods for the therapy and diagnosis of colon cancer
IN King, Gordon E., Shoreline, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Secrist, Heather, Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2003166064 A1 20030904
AI US 2002-99926 A1 20020314 (10)
RLI Continuation-in-part of Ser. No. US 2001-33528, filed on 26 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001, PENDING
PRAI US 2001-302051P 20010629 (60)
US 2001-279763P 20010328 (60)
US 2000-223283P 20000803 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 8531
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 3 OF 12 USPATFULL on STN
AN 2003:106233 USPATFULL
TI Compositions and methods for the therapy and diagnosis of pancreatic cancer
IN Benson, Darin R., Seattle, WA, UNITED STATES

Kalos, Michael D., Seattle, WA, UNITED STATES
Lodes, Michael J., Seattle, WA, UNITED STATES
Persing, David H., Redmond, WA, UNITED STATES
Hepler, William T., Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2003073144 A1 20030417
AI US 2002-60036 A1 20020130 (10)
PRAI US 2001-333626P 20011127 (60)
US 2001-305484P 20010712 (60)
US 2001-265305P 20010130 (60)
US 2001-267568P 20010209 (60)
US 2001-313999P 20010820 (60)
US 2001-291631P 20010516 (60)
US 2001-287112P 20010428 (60)
US 2001-278651P 20010321 (60)
US 2001-265682P 20010131 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 14253
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 4 OF 12 MEDLINE on STN
AN 2003140239 MEDLINE
DN PubMed ID: 12655009
TI Molecular recognition properties of IGS-mediated reactions catalyzed by a Pneumocystis carinii group I intron.
AU Johnson Ashley K; Baum Dana A; Tye Jesse; Bell Michael A; Testa Stephen M
CS Department of Chemistry, University of Kentucky, Lexington, KY 40506, USA.
SO Nucleic acids research, (2003 Apr 1) 31 (7) 1921-34.
Journal code: 0411011. ISSN: 1362-4962.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200304
ED Entered STN: 20030326
Last Updated on STN: 20030417
Entered Medline: 20030416
AB We report the development, analysis and use of a new combinatorial approach to analyze the substrate sequence dependence of the suicide **inhibition**, cyclization, and reverse cyclization reactions catalyzed by a **group I intron** from the opportunistic pathogen Pneumocystis carinii. We demonstrate that the sequence specificity of these Internal Guide Sequence (IGS)-mediated reactions is not high. In addition, the sequence specificity of suicide inhibition decreases with increasing MgCl(2) concentration, reverse cyclization is substantially more sequence specific than suicide inhibition, and multiple reverse cyclization products occur, in part due

to the formation of multiple cyclization intermediates. Thermodynamic analysis reveals that a base pair at position -4 of the resultant 5' exon-IGS (P1) helix is crucial for tertiary docking of the P1 helix into the catalytic core of the ribozyme in the suicide inhibition reaction. In contrast to results reported with a Tetrahymena ribozyme, altering the sequence of the IGS of the P.carinii ribozyme can result in a marked reduction in tertiary stability of docking the resultant P1 helix into the catalytic core of the ribozyme. Finally, results indicate that RNA targeting strategies which exploit tertiary interactions could have low specificity due to the tolerance of mismatched base pairs.

L23 ANSWER 5 OF 12 USPATFULL on STN
AN 2002:272801 USPATFULL
TI Compositions and methods for the therapy and diagnosis of colon cancer
IN Stolk, John A., Bothell, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Chenault, Ruth A., Seattle, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002150922 A1 20021017
AI US 2001-998598 A1 20011116 (9)
PRAI US 2001-304037P 20010710 (60)
US 2001-279670P 20010328 (60)
US 2001-267011P 20010206 (60)
US 2000-252222P 20001120 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 9233
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 6 OF 12 USPATFULL on STN
AN 2002:243051 USPATFULL
TI Compositions and methods for the therapy and diagnosis of ovarian cancer
IN Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002132237 A1 20020919
AI US 2001-867701 A1 20010529 (9)
PRAI US 2000-207484P 20000526 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 25718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 7 OF 12 MEDLINE on STN DUPLICATE 1
AN 2002432246 MEDLINE
DN PubMed ID: 12169671
TI **Oligonucleotide** directed misfolding of RNA **inhibits** Candida albicans **group I intron** splicing.
AU Childs Jessica L; Disney Matthew D; Turner Douglas H
CS Department of Chemistry, University of Rochester, Rochester, NY 14627-0216, USA.
SO Proceedings of the National Academy of Sciences of the United States of America, (2002 Aug 20) 99 (17) 11091-6.
Journal code: 7505876. ISSN: 0027-8424.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200209
ED Entered STN: 20020822
Last Updated on STN: 20030105
Entered Medline: 20020927
AB RNA is becoming an important therapeutic target. Many potential RNA targets require secondary or tertiary structure for function. Examples include ribosomal RNAs, RNase P RNAs, mRNAs with untranslated regions that regulate translation, and group I and group II introns. Here, a method is described to inhibit RNA function by exploiting the propensity of RNA to adopt multiple folded states that are of similar free energy. This method, called **oligonucleotide** directed misfolding of RNA (ODMiR), uses short **oligonucleotides** to stabilize inactive structures. The ODMiR method is demonstrated with the group I intron from Candida albicans, a human pathogen. The **oligonucleotides**, (L)(TACCTTTC) and T(L)CT(L)AC(L)GA(L)CG(L)GC(L)C, with L denoting a locked nucleic acid residue, **inhibit** 50% of **group I intron** splicing in a transcription mixture at about 150 and 30 nM **oligonucleotide** concentration, respectively. Both **oligonucleotides** induce misfolds as determined by native gel electrophoresis and diethyl pyrocarbonate modification. The ODMiR approach provides a potential therapeutic strategy applicable to RNAs with secondary or tertiary structures required for function.

L23 ANSWER 8 OF 12 MEDLINE on STN DUPLICATE 2
AN 2001277619 MEDLINE
DN PubMed ID: 11371215
TI Binding enhancement by tertiary interactions and suicide **inhibition** of a Candida albicans **group I intron** by phosphoramidate and 2'-O-methyl hexanucleotides.
AU Disney M D; Matray T; Gryaznov S M; Turner D H
CS Departments of Chemistry and Pediatrics, University of Rochester, Rochester, New York 14627-0216, USA.
NC AI45398 (NIAID)
SO Biochemistry, (2001 May 29) 40 (21) 6520-6.
Journal code: 0370623. ISSN: 0006-2960.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English

FS Priority Journals
EM 200108
ED Entered STN: 20010820
Last Updated on STN: 20010820
Entered Medline: 20010816
AB Candida albicans is one of many infectious pathogens that are evolving resistance to current treatments. RNAs provide a large class of targets for new therapeutics for fighting these organisms. One strategy for targeting RNAs uses short **oligonucleotides** that exhibit binding enhancement by tertiary interactions in addition to Watson-Crick pairing. A potential RNA target in C. albicans is the self-splicing group I intron in the LSU rRNA precursor. The recognition elements that align the 5' exon splice site for a ribozyme derived from this precursor are complex [Disney, M. D., Haidaris, C. G., and Turner, D. H. (2001) Biochemistry 40, 6507-6519]. These recognition elements have been used to guide design of hexanucleotide mimics of the 5' exon that have backbones modified for nuclease stability. These hexanucleotides bind as much as 100000-fold more tightly to a ribozyme derived from the intron than to a hexanucleotide mimic of the intron's internal guide sequence, r(GGAGGC). Several of these **oligonucleotides** inhibit precursor self-splicing via a suicide inhibition mechanism. The most promising suicide inhibitor is the ribophosphoramidate rn(GCCUC)rU, which forms more trans-spliced than cis-spliced product at **oligonucleotide** concentrations of >100 nM at 1 mM Mg(2+). The results indicate that short **oligonucleotides** modified for nuclease stability can target catalytic RNAs when the elements of tertiary interactions are complex.

L23 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:666925 CAPLUS
DN 133:248036
TI IGS-binding, phosphoramidate- or thiophosphoramidate-linked **oligonucleotides** for **inhibition** of **Group I intron** self-splicing
IN Testa, Stephen M.; Disney, Matthew D.; Gryaznov, Sergei M.; Turner, Douglas H.
PA Geron Corp., USA; University of Rochester
SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000055374	A1	20000921	WO 2000-US7045	20000315

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-124451P P 19990315
AB A method of **inhibiting** the self-splicing of a **Group I intron** is disclosed. The method uses an **oligonucleotide** having a sequence essentially identical to a guide sequence found in the 5' flanking exon and terminates with a 3' ribonucleoside. Usually the **oligonucleotide** has N3'→P5' phosphoramidate or thiophosphoramidate linkages rather than phosphodiester linkages. A method of **inhibiting** the growth of organisms having **Group I intron**, particularly certain pathogenic fungi including Pneumocystis carinii, Candida albicans and Aspergillus nidulans using the **oligonucleotide** is also provided.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 10 OF 12 USPATFULL on STN
AN 1998:157102 USPATFULL
TI In vitro assay for inhibitors of the intron self-splicing reaction in Pneumocystis carinii
IN Leibowitz, Michael J., Manalpan, NJ, United States
Liu, Yong, Piscataway, NJ, United States
PA University of Medicine & Dentistry of NJ, Piscataway, NJ, United States (U.S. corporation)
PI US 5849484 19981215
AI US 1995-491690 19950619 (8)
RLI Continuation of Ser. No. US 1993-68248, filed on 27 May 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-922987, filed on 30 Jul 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Myers, Carla J.
LREP Muccino, Richard R
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN 27 Drawing Figure(s); 27 Drawing Page(s)
LN.CNT 1906
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention pertains to an in vitro method for assaying for an inhibitor of the catalytic Group I self-splicing intron reaction in the nuclear rRNA genes of Pheumocystis carinii which comprises the steps of (a) providing a DNA template containing the intron (I) from the 26S rRNA gene in Pneumocystis carinii and a portion of the 5' and 3' flanking exons (E1 and E2, respectively) between nucleotides 1963 and 2267 of 26S rRNA (660 nucleotides of amplified rRNA gene including the group I intron); (b) preparing an RNA precursor by transcription of the DNA template in the presence of labeled nucleoside triphosphates to produce a labeled RNA precursor (E1-I-E2); (c) purifying the RNA precursor; (d) incubating the RNA precursor and the inhibitor in the presence of guanosine triphosphate and magnesium ions; and (e) determining the degree of inhibition by the inhibitor on the intron **splicing** reaction in the **RNA** precursor by measuring the amount of labeled splicing intermediates and splicing products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 11 OF 12 USPATFULL on STN
AN 1998:78930 USPATFULL
TI Diagnostic probes for pneumocystis carini
IN Leibowitz, Michael J., Manalapan, NJ, United States
Liu, Yong, Piscataway, NJ, United States
PA University of Medicine & Dentistry of New Jersey, Newark, NJ, United States (U.S. corporation)
PI US 5776680 19980707
AI US 1995-505509 19950721 (8)
RLI Continuation of Ser. No. US 1994-298087, filed on 31 Aug 1994, now abandoned which is a continuation of Ser. No. US 1992-922987, filed on 30 Jul 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Myers, Carla J.
LREP Muccino, Richard R.
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 22 Drawing Figure(s); 22 Drawing Page(s)
LN.CNT 1431
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention pertains to a method for diagnosing for Pneumocystis carinii by detecting the presence of a nucleic acid sequence containing the 26S rRNA gene specific for Pneumocystis carinii. More particularly, this invention relates to a method for diagnosing for Pneumocystis carinii which comprises amplifying a sample of DNA from Pneumocystis carinii by polymerase chain reaction (PCR) using species specific primers and detecting the PCR products with species specific radioactive or non-radioactive **oligonucleotide** probes. This invention also relates to a method for diagnosing for various species of Pneumocystis carinii by detecting the presence of a nucleic acid sequence containing the particular 16S or 26S rRNA gene sequence specific for that species of Pneumocystis carinii.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 12 OF 12 USPATFULL on STN
AN 97:3684 USPATFULL
TI Methods and kits for RNA binding compounds
IN Rando, Robert R., Newton Center, MA, United States
Wang, Yong, Boston, MA, United States
PA President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)
PI US 5593835 19970114
AI US 1995-440084 19950512 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Whisenant, Ethan
LREP Lappin & Kusmer
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 1126
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are methods and kits for screening for compounds which bind to a target RNA, for isolating a target RNA from a sample, and for determining the presence and serum level of an aminoglycoside antibiotic in a subject. Also disclosed are kits for diagnosing the presence and identity of a bacterium or virus, and methods of increasing the potency of the binding interaction between an aminoglycoside antibiotic and a target RNA.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=> s inhibit? (4a) group I intron?/ti
L24 47 INHIBIT? (4A) GROUP I INTRON?/TI

=> dup rem l24
PROCESSING COMPLETED FOR L24
L25 20 DUP REM L24 (27 DUPLICATES REMOVED)

=> s l25 and oligonucleotide?
L26 4 L25 AND OLIGONUCLEOTIDE?

=> d l26 bib abs 1-4

L26 ANSWER 1 OF 4 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2004:100817 BIOSIS
DN PREV200400102456
TI New approaches to targeting RNA with **oligonucleotides**: **Inhibition** of **group I intron** self-splicing.
AU Disney, Matthew D.; Childs, Jessica L.; Turner, Douglas H. [Reprint Author]
CS Department of Chemistry, University of Rochester, Rochester, NY, 14627-0216, USA
turner@chem.rochester.edu
SO Biopolymers, (January 2004) Vol. 73, No. 1, pp. 151-161. print.
ISSN: 0006-3525 (ISSN print).
DT Article
LA English
ED Entered STN: 18 Feb 2004
Last Updated on STN: 18 Feb 2004
AB RNA is one class of relatively unexplored drug targets. Since RNAs play a myriad of essential roles, it is likely that new drugs can be developed that target RNA. There are several factors that make targeting RNA particularly attractive. First, the amount of information about the roles of RNA in essential biological processes is currently being expanded. Second, sequence information about targetable RNA is pouring out of genome sequencing efforts at unprecedented levels. Third, designing and screening potential **oligonucleotide** therapeutics to target RNA is relatively simple. The use of **oligonucleotides** in cell culture, however, presents several challenges such as **oligonucleotide** uptake and stability, and selective targeting of genes of interest. Here, we review investigations aimed at targeting RNA with **oligonucleotides** that can circumvent several of these potential problems. The hallmark of the strategies discussed is the use of short **oligonucleotides**, which may have the advantage of higher cellular uptake and improved binding selectivity compared to longer **oligonucleotides**. These strategies have been applied to Group I introns from the mammalian pathogens Pneumocystis carinii and Candida albicans. Both are examples of fungal infections that are increasing in number and prevalence.

L26 ANSWER 2 OF 4 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2002:505044 BIOSIS
DN PREV200200505044
TI **Oligonucleotide** directed misfolding of RNA **inhibits** Candida albicans **group I intron** splicing.
AU Childs, Jessica L.; Disney, Matthew D.; Turner, Douglas H. [Reprint author]
CS Department of Chemistry, University of Rochester, Rochester, NY, 14627-0216, USA
turner@chem.rochester.edu
SO Proceedings of the National Academy of Sciences of the United States of America, (August 20, 2002) Vol. 99, No. 17, pp. 11091-11096. print.

CODEN: PNASA6. ISSN: 0027-8424.
DT Article
LA English
ED Entered STN: 25 Sep 2002
Last Updated on STN: 25 Sep 2002
AB RNA is becoming an important therapeutic target. Many potential RNA targets require secondary or tertiary structure for function. Examples include ribosomal RNAs, RNase P RNAs, mRNAs with untranslated regions that regulate translation, and group I and group II introns. Here, a method is described to inhibit RNA function by exploiting the propensity of RNA to adopt multiple folded states that are of similar free energy. This method, called **oligonucleotide** directed misfolding of RNA (ODMiR), uses short **oligonucleotides** to stabilize inactive structures. The ODMiR method is demonstrated with the group I intron from Candida albicans, a human pathogen. The **oligonucleotides**, L(TACCTTTC) and TLCTLACLGALCGLGCLC, with L denoting a locked nucleic acid residue, inhibit 50% of group I intron splicing in a transcription mixture at about 150 and 30 nM **oligonucleotide** concentration, respectively. Both **oligonucleotides** induce misfolds as determined by native gel electrophoresis and diethyl pyrocarbonate modification. The ODMiR approach provides a potential therapeutic strategy applicable to RNAs with secondary or tertiary structures required for function.

L26 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2001:329174 BIOSIS
DN PREV200100329174
TI Binding enhancement by tertiary interactions and suicide **inhibition** of a Candida albicans **group I intron** by phosphoramidate and 2'-O-methyl hexanucleotides.
AU Disney, Matthew D.; Matray, Tracy; Gryaznov, Sergei M.; Turner, Douglas H. [Reprint author]
CS Department of Chemistry, University of Rochester, Rochester, NY, 14627-0216, USA
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AB Candida albicans is one of many infectious pathogens that are evolving resistance to current treatments. RNAs provide a large of targets for new therapeutics for fighting these organisms. One strategy for targeting RNAs uses short **oligonucleotides** that exhibit binding enhancement by tertiary interactions in addition to Watson-Crick pairing. A potential RNA target in C. albicans is the self-splicing group I intron in the LSU rRNA precursor. The recognition elements that align the 5' exon splice site for a ribozyme derived from this precursor are complex (Disney, M.D., Haidaris, C. G., and Turner, D. H. (2001) Biochemistry 40, 6507-6519). These recognition elements have been used to guide design of hexanucleotide mimics of the 5' exon that have backbones modified for nuclease stability. These hexanucleotides bind as much as 1000000-fold more tightly to a ribozyme derived from the intron than to a hexanucleotide mimic of the intron's internal guide sequence, r(GGAGGC). Several of these **oligonucleotides** inhibit precursor self-splicing via a suicide inhibition mechanism. The most promising suicide inhibitor is the ribophosphoramidate rn (GCCUC)rU, which forms more trans-spliced than cis-spliced product at **oligonucleotide** concentrations of >100 nM at 1 mM Mg2+. The results indicate that short **oligonucleotides** modified for nuclease stability can target catalyticRNAs when the elements of tertiary interactions are complex.

L26 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:666925 CAPLUS
DN 133:248036
TI IGS-binding, phosphoramidate- or thiophosphoramidate-linked **oligonucleotides** for **inhibition** of **Group I intron** self-splicing
IN Testa, Stephen M.; Disney, Matthew D.; Gryaznov, Sergei M.; Turner, Douglas H.
PA Geron Corp., USA; University of Rochester
SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2
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PRAI US 1999-124451P P 19990315
AB A method of inhibiting the self-splicing of a Group I intron is disclosed. The method uses an **oligonucleotide** having a sequence essentially identical to a guide sequence found in the 5' flanking exon and terminates with a 3' ribonucleoside. Usually the **oligonucleotide** has N3'→P5' phosphoramidate or thiophosphoramidate linkages rather than phosphodiester linkages. A method of inhibiting the growth of organisms having Group I intron, particularly certain pathogenic fungi including Pneumocystis carinii, Candida albicans and Aspergillus nidulans using the **oligonucleotide** is also provided.
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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